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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
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ART UNIT	PAPER NUMBER
1636	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	09/996,484	CHOO ET AL.
	Examiner	**Art Unit**
	Jennifer Dunston	1636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 February 2011*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4,5,7,8,10,11,13-15,21-26,31,34,35,38-47 and 50-54* is/are pending in the application.

4a) Of the above claim(s) *1,2,4,5,7,8,10,11,13-15,21-26,31,35 and 38-47* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *34 and 50-54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

This action is in response to the amendment, filed 2/9/2011, in which claims 34 and 52-54 were amended. Claims 1, 2, 4, 5, 7, 8, 10, 11, 13-15, 21-26, 31, 34, 35, 38-47 and 50-54 are pending.

Applicant's arguments have been thoroughly reviewed, but are not persuasive for the reasons that follow. Any rejections and objections not reiterated in this action have been withdrawn. **This action is FINAL.**

Election/Restrictions

Applicant elected Group III without traverse in the reply filed 4/16/2004.

Claims 1, 2, 4, 5, 7, 8, 10, 11, 13-15, 21-26, 31, 35 and 38-47 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 4/16/2004.

Claims 34 and 50-54 are under consideration.

Response to Arguments - 35 USC § 112

The rejection of claims 52-54 under 35 U.S.C. 112, second paragraph, has been withdrawn in view of Applicant's amendment to the claims in the reply filed 2/9/2011.

Response to Arguments - 35 USC § 102

The rejection of claims 34, 51, 52 and 54 under 35 U.S.C. 102(b) as being anticipated by Corbi et al has been withdrawn in view of Applicant's amendment to the claims in the reply filed 2/9/2011.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 34, 50, 52 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christopherson et al (Proceedings of the National Academy of Sciences USA, Vol. 89, No. 14, pages 6314-6318, July 1992, cited in a prior action; see the entire reference) in view of Choo et al (WO 98/53059, cited in a prior action; see the entire reference). This rejection was made in the Office action mailed 11/9/2010 and is reiterated below.

Christopherson et al teach a complex comprising a polypeptide comprising (i) a DNA binding domain and an ecdysone receptor ligand binding domain; and (ii) a ligand, such as muristerone A, that binds to the ligand binding domain (e.g., pages 6314-6315, Materials and Methods; pages 6315-6317, Results; Figure 2). Christopherson et al teach the polypeptide where the DNA binding domain is selected from a wild type ecdysone receptor DNA binding domain, a glucocorticoid receptor DNA binding domain, an engineered, non-naturally occurring rat glucocorticoid receptor DNA binding domain containing a two-amino acid substitution (G458E, S459G) that alters the DNA-binding specificity; and an E. coli LexA DNA binding domain (e.g., Figure 2). Christopherson et al teach that each of the DNA-binding and transactivation activities of these proteins were rendered ecdysteroid-dependent when fused to the ligand-binding domain of the ecdysone receptor (e.g., Abstract; pages 6315-6317, Results; Tables 1-2). Christopherson et al teach that novel target-gene specificity was obtained by using the chimeric receptors containing the ecdysone receptor ligand-binding domain fused to heterologous DNA binding domains (e.g., page 6314, paragraph bridging columns; paragraph bridging pages 6317-6318). Further, the transcriptional regulatory activities of the fusion polypeptides are dependent upon the addition of exogenous ligand, allowing one to "switch on" the activator with ecdysteroids (e.g., paragraph bridging pages 6317-6318; page 6318, left column, 2nd full paragraph). Christopherson et al teach that the development of a system for regulated expression of endogenous and exogenous genes in eukaryotic cells should provide an important method to study the function of those gene products (e.g., page 6318, left column, 2nd full paragraph).

Christopherson et al do not teach the complex where the engineered, non-naturally occurring DNA binding domain is an engineered, non-naturally occurring Cys2-His2 zinc finger DNA binding domain.

Choo et al teach that protein-nucleic acid recognition is a commonplace phenomenon which is central to a large number of biomolecular control mechanisms which regulate the function of eukaryotic and prokaryotic cells, such as the regulation of gene expression (e.g., page 1, lines 7-11). Choo et al teach a code which permits the selection of any nucleic acid sequence as the target sequence for the design of a specific zinc finger nucleic acid-binding protein which will bind thereto (e.g., paragraph bridging pages 2-3). Choo et al teach that the zinc finger nucleic acid-binding protein is a protein of the Cys2-His2 zinc finger class capable of binding to a nucleic acid base triplet in a target nucleic acid sequence, wherein binding to the nucleic acid base triplet by an alpha-helical zinc finger nucleic acid protein is determined according to the disclosed code (e.g., page 3, line 6-27; page 6, line 21 to page 7, line 12). Thus, Choo et al teach a polypeptide comprising an engineered, non-naturally occurring Cys2-His2 zinc finger binding domain, the zinc finger binding domain capable of binding to a DNA target site. Further, Choo et al teach that the disclosed zinc finger binding motifs can be combined into nucleic acid binding proteins having a multiplicity of fingers, commonly at least three zinc fingers (e.g., page 13, lines 6-22). Choo et al teach that the invention provides nucleic acid binding proteins which can be engineered with exquisite specificity, lending to the design of any zinc finger-comprising molecule of which specific nucleic acid binding is required (e.g., page 25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the engineered, non-naturally occurring DNA binding domain of

Christopherson et al with an engineered, non-naturally occurring Cys2-His2 zinc finger binding domain taught by Choo et al because Christopherson et al teach it is within the ordinary skill in the replace the wild type ecdysone receptor DNA binding domain with a heterologous domain, including one mutated to provide altered DNA-biding specificity, and Choo et al teach engineered, non-naturally occurring Cys2-His2 zinc finger binding domains designed by the disclosed rules to bind to any particular target sequence.

One would have been motivated to make such a modification in order to receive the expected benefit of providing polypeptides whose DNA-binding and transactivation activity are regulated by an exogenous ligand as taught by Christopherson for the regulation of any gene targeted by the engineered, non-naturally occurring Cys2-His2 zinc finger DNA binding domain of Choo et al. By altering the DNA binding specificity one would provide a system for regulated expression of endogenous and exogenous genes in eukaryotic cells to provide an important method to study the function of those gene products. Based upon the teachings of the cited references, the high skill of one of ordinary skill in the art, and absent any evidence to the contrary, there would have been a reasonable expectation of success to result in the claimed invention.

Claims 52 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim et al (US Patent No. 7,189,506 B1, cited in a prior action; see the entire reference) in view of Choo et al (WO 98/53059, cited in a prior action; see the entire reference). This rejection was made in the Office action mailed 11/9/2010 and is reiterated below.

Lim et al teach a molecular switch system comprising a transcriptional regulatory polypeptide and an exogenously supplied compound, which targets nucleic acid, not protein (e.g., column 14, lines 50-59). Lim et al teach that the compound, when bound to double stranded DNA at sites in the vicinity of regulatory protein binding sequences, can displace the bound protein (e.g., column 14, lines 50-59). Lim et al teach a transcriptional regulatory fusion protein which is a recombinant fusion protein consisting essentially of a DNA binding domain and a regulatory domain, where the regulatory protein is (1) natural (native), (2) chimeric (chimera of the DNA-binding domain of a natural protein and the regulatory (activator or repressor) domain of a natural protein, (3) synthetic, having a novel DNA-binding domain designed by structural modeling, phage display screen, or other methods, or (4) may not take the form of a fusion protein (e.g., column 9, line 55 to column 10, line 4; column 12, lines 28-52; column 15, lines 1-14). With regard to synthetic transcriptional regulatory fusion proteins, Lim et al teach that the protein may be engineered or designed to specifically bind a compound-binding sequence/transcriptional regulatory binding site, such as novel zinc three-finger proteins which bind to a specific 9 to 10 bp sequence (e.g., column 16, line 30 to column 17, line 2).

Lim et al do not specifically teach that the engineered, non-naturally occurring zinc finger binding domains are Cys2-His2 zinc finger binding domains.

Choo et al teach that protein-nucleic acid recognition is a commonplace phenomenon which is central to a large number of biomolecular control mechanisms which regulate the function of eukaryotic and prokaryotic cells, such as the regulation of gene expression (e.g., page 1, lines 7-11). Choo et al teach a code which permits the selection of any nucleic acid sequence as the target sequence for the design of a specific zinc finger nucleic acid-binding protein which

will bind thereto (e.g., paragraph bridging pages 2-3). Choo et al teach that the zinc finger nucleic acid-binding protein is a protein of the Cys2-His2 zinc finger class capable of binding to a nucleic acid base triplet in a target nucleic acid sequence, wherein binding to the 5' base of the nucleic acid base triplet by an alpha-helical zinc finger nucleic acid protein is determined according to the disclosed code (e.g., page 3, line 6-27; page 6, line 21 to page 7, line 12). Thus, Choo et al teach a polypeptide comprising an engineered, non-naturally occurring Cys2-His2 zinc finger binding domain, the zinc finger binding domain capable of binding to a DNA target site. Further, Choo et al teach that the disclosed zinc finger binding motifs can be combined into nucleic acid binding proteins having a multiplicity of fingers, commonly at least three zinc fingers (e.g., page 13, lines 6-22). Choo et al teach that the invention provides nucleic acid binding proteins which can be engineered with exquisite specificity, lending to the design of any zinc finger-comprising molecule of which specific nucleic acid binding is required (e.g., page 25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the polypeptide of the molecular switch system of Lim et al to specifically include the engineered, non-naturally occurring Cys2-His2 zinc finger binding domains taught by Choo et al as the non-naturally occurring zinc finger binding domain of the transcriptional regulatory polypeptide because Lim et al teach it is within the ordinary skill in the art to use engineered, non-naturally occurring zinc finger binding domains and Choo et al teach that it is the Cys2-His2 zinc finger class that is capable of being engineered to bind a particular sequence according to the disclosed code.

One would have been motivated to make such a modification in order to receive the expected benefit of providing a transcriptional regulatory polypeptide capable of binding a particular target binding site with specificity as taught by Choo et al. Based upon the teachings of the cited references, the high skill of one of ordinary skill in the art, and absent any evidence to the contrary, there would have been a reasonable expectation of success to result in the claimed invention.

Claims 34 and 50-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al (US Patent No. 6,333,318 B1; see the entire reference) in view of Choo et al (WO 98/53059, cited in a prior action; see the entire reference). This is a new rejection, necessitated by the amendment filed 2/9/2011.

Evans et al teach products for modulating the expression of exogenous genes in mammalian systems (e.g., column 1, lines 10-12). Evans et al teach a polypeptide comprising (i) a ligand binding domain capable of binding an ecdysteroid; (ii) a zinc finger DNA-binding domain that binds to a response element; and (iii) an activation domain (e.g., column 7, lines 53-62; column 8, lines 24-34 and line 62; column 9, lines 8-12; paragraph bridging columns 17-18). Further, Evans et al teach a ligand that binds to the polypeptide, where the ligand is a compound, such as an ecdysteroid and where ligand binding to the polypeptide modulates binding of the DNA-binding domain to its target response element sequence (e.g., column 5, line 31 to column 6, line 17; column 12, line 23 to column 15, line 4). Evans et al teach that binding of ecdysone (as well as analogs and mimics thereof) induces binding of the polypeptide to the response element to activate gene expression, and binding of an ecdystone antagonist inhibits binding of

the polypeptide to the response element to turn off gene expression (e.g., column 5, line 31 to column 6, line 17; paragraph bridging columns 14-15). Evans et al contemplate the modification of existing DNA-binding domains to allow them to recognize new and/or specific target recognition sequences, the use of in vitro evolution methods to improve existing DNA-binding domains, and the use of DNA-binding domains which are engineered with novel DNA-recognition specificity (e.g., column 10, lines 14-16; paragraph bridging columns 10-11). Evans et al teach that the products provide the ability to manage the expression of genes introduced into mammalian cells and animals, which further advances many areas of biology and medicine (e.g., column 2, lines 23-25).

Evans et al do not specifically teach that the engineered, mutated (non-naturally occurring) DNA-binding domains are Cys2-His2 zinc finger binding domains.

Choo et al teach that protein-nucleic acid recognition is a commonplace phenomenon which is central to a large number of biomolecular control mechanisms which regulate the function of eukaryotic and prokaryotic cells, such as the regulation of gene expression (e.g., page 1, lines 7-11). Choo et al teach a code which permits the selection of any nucleic acid sequence as the target sequence for the design of a specific zinc finger nucleic acid-binding protein which will bind thereto (e.g., paragraph bridging pages 2-3). Choo et al teach that the zinc finger nucleic acid-binding protein is a protein of the Cys2-His2 zinc finger class capable of binding to a nucleic acid base triplet in a target nucleic acid sequence, wherein binding to the 5' base of the nucleic acid base triplet by an alpha-helical zinc finger nucleic acid protein is determined according to the disclosed code (e.g., page 3, line 6-27; page 6, line 21 to page 7, line 12). Thus, Choo et al teach a polypeptide comprising an engineered, non-naturally occurring Cys2-His2

zinc finger binding domain, the zinc finger binding domain capable of binding to a DNA target site. Further, Choo et al teach that the disclosed zinc finger binding motifs can be combined into nucleic acid binding proteins having a multiplicity of fingers, commonly at least three zinc fingers (e.g., page 13, lines 6-22). Choo et al teach that the invention provides nucleic acid binding proteins which can be engineered with exquisite specificity, lending to the design of any zinc finger-comprising molecule of which specific nucleic acid binding is required (e.g., page 25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the polypeptide of the products of Evans et al to specifically include the engineered, non-naturally occurring Cys2-His2 zinc finger binding domains taught by Choo et al as the non-naturally occurring binding domain or zinc finger binding domain of the transcriptional regulatory polypeptide because Evans et al teach it is within the ordinary skill in the art to use zinc finger binding domains and to engineered, non-naturally occurring DNA binding domains to create new binding specificities, and Choo et al teach that it is the Cys2-His2 zinc finger class that is capable of being engineered to bind a particular sequence according to the disclosed code.

One would have been motivated to make such a modification in order to receive the expected benefit of providing a transcriptional regulatory polypeptide capable of binding a particular target sequence with specificity as taught by Choo et al in order to broaden the applications of the products taught by Evans et al for the study of additional genes. Based upon the teachings of the cited references, the high skill of one of ordinary skill in the art, and absent

any evidence to the contrary, there would have been a reasonable expectation of success to result in the claimed invention.

Response to Arguments - 35 USC § 103

With respect to the rejection of claims 34, 50, 52 and 53 under 35 U.S.C. 103(a) as being unpatentable over Christopherson et al in view of Choo et al, Applicant's arguments filed 2/9/2011 have been fully considered but they are not persuasive.

The response asserts that there is nothing in any combination of Christopherson and Choo that teaches a non-naturally occurring C2H2 zinc finger DNA binding domain and a steroid hormone DNA-binding domain are necessarily interchangeable.

This argument is not found persuasive. The art cited in the rejection of record supports the interchangeable nature of DNA binding domains in the polypeptides of Christopherson et al. Christopherson et al teach that the DNA-binding activities of mammalian or bacterial proteins were rendered ecdysteroid-dependent when fused to the ligand binding domain of the ecdysone receptor (e.g., Abstract). Specifically, Christopherson et al teach that each of the DNA-binding and transactivation activities of these proteins were rendered ecdysteroid-dependent when fused to the ligand-binding domain of the ecdysone receptor (e.g., Abstract; pages 6315-6317, Results; Tables 1-2; Figure 2). Christopherson et al teach that novel target-gene specificity was obtained by using the chimeric receptors containing the ecdysone receptor ligand-binding domain fused to heterologous DNA binding domains (e.g., page 6314, paragraph bridging columns; paragraph bridging pages 6317-6318). Thus, Christopherson et al clearly provide evidence of the modularity of the polypeptides, where a heterologous DNA binding domain is functional when

combined with the activation and ligand binding domains. Furthermore, one would expect the zinc finger DNA binding domains of Choo et al to retain their function in the polypeptides of Christopherson et al, because Choo et al teach that the disclosed invention leads to the design of any zinc finger-comprising molecule of which specific nucleic acid binding is required, such as the manufacture of chimeric restriction enzymes in which a nucleic acid cleaving domain is fused to a zinc finger DNA binding domain (e.g., page 25, lines 1-6).

The response states the following:

> In particular, the claims now make explicit that the polypeptide is not a fusion of a zinc finger DNA binding domain and a ligand receptor domain. Rather, the ligand binds to the zinc finger protein.

This argument is not found persuasive. The claims are drawn to a zinc finger protein <u>comprising</u> an engineered, non-naturally occurring Cys2-His2 zinc finger binding domain. The claims do not exclude the presence of a ligand binding domain in the zinc finger protein. Claims 34, 50 and 51 require the ligand to bind to the polypeptide, but do not limit the particular domain to which the ligand must bind. The binding of a ligand to a ligand binding domain falls within the scope of what is claimed. Furthermore, claims 52-54 do not require the ligand to bind to the zinc finger protein. Moreover, the specification teaches that the polypeptide will at least have binding capability (e.g., the zinc finger DNA binding domain) and also may have another biological function of a protein or domain (e.g., page 12, lines 7-16; page 67, line 26 to page 69, line 5). Accordingly, there is nothing in the claims or specification to exclude the inclusion of a ligand-binding domain in the claimed polypeptide.

For these reasons, and the reasons made of record in the previous office actions, the rejection is <u>maintained</u>.

With respect to the rejection of claims 52 and 54 under 35 U.S.C. 103(a) as being unpatentable over Lim et al in view of Choo et al, Applicant's arguments filed 2/9/2011 have been fully considered but they are not persuasive.

The response asserts that Lim teaches only complexes including a fusion protein comprising a DNA binding domain and a heterologous regulatory domain. The response asserts that the claims exclude fusion proteins and the rejection should be withdrawn.

This argument is not found persuasive. The claims are drawn to a zinc finger protein comprising an engineered, non-naturally occurring Cys2-His2 zinc finger binding domain. The claims do not exclude the presence of a ligand binding domain in the zinc finger protein. The specification teaches that the polypeptide will at least have binding capability (e.g., the zinc finger DNA binding domain) and also may have another biological function of a protein or domain (e.g., page 12, lines 7-16; page 67, line 26 to page 69, line 5). The specification teaches that an activator or repressor domain may be included in the DNA binding protein if one is not already present (e.g., page 10, lines 25-28). Accordingly, there is nothing in the claims or specification to exclude the inclusion of a regulatory domain in the zinc finger protein.

For these reasons, and the reasons made of record in the previous office actions, the rejection is maintained.

Conclusion

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Dunston whose telephone number is (571)272-2916. The examiner can normally be reached on M-F, 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jennifer Dunston/
Primary Examiner
Art Unit 1636